

stomatal opening, such as temperatures ranging from 70 to 90° F. and high humidity, also chance to favor maximal germination of spores and subsequent growth and therefore lead to severe leaf infection. Such studies as these will do much to lift the fog that shrouds the problem of infection in the field of phytopathology. The term "stomatal movement," of the title, is somewhat unfortunately chosen. The authors have established a relation between infection and stomatal opening rather than between infection and stomatal movement.—GEORGE K. K. LINK.

Addisonia.—This is the title of a new journal issued from the New York Botanical Garden devoted to "colored illustrations and popular descriptions of plants." It is issued quarterly, the first number bearing the date March 1916, and each number will consist of 10 colored plates with accompanying letter press. The subsidy for the journal is furnished by a fund left for this purpose by Judge ADDISON BROWN. This explains the name and also the color of the cover. The annual subscription price is \$10. The illustrations and letter press of the initial number are of the highest order, the plants illustrated and described being *Rhododendron carolinianum*, *Cassia polyphylla*, *Robinia Kelseyi*, *Pachyphytum longifolium*, *Begonia Cowellii*, *Echeveria setosa*, *Columnea gloriosa*, *Fouquieria formosa*, *Maxillaria ringens*, and *Nopalea Auberi*.—J. M. C.

Dimery in Brassica.—Cases in which two or more genetic factors produce independently a single somatic character, or modify it in such a manner as not to destroy its identity, are being reported frequently. HALLQVIST²⁹ gives the results of crossing a form of *Brassica Napus* characterized by undivided leaves, with a form having strongly pinnatifid lobing. The F₂ families showed several grades of lobing in different plants, and in 493 individuals out of 8,296 the recessive unlobed type reappeared, this being almost exactly 1:15. All of the 23 separate F₂ families which make up this total likewise show a very close approximation to the same ratio. The investigation is being continued into the F₃.—GEO. H. SHULL.

Pollen sterility and hybrids.—GATES and GOODSPEED³⁰ have tested the claim that "bad pollen" is a criterion of hybridity by examining certain geographically isolated Californian plants which have had no opportunity for crossing. *Trillium sessile giganteum*, *Scoliopus Bigelovii*, *Dirca occidentalis*, *Ranunculus californicus*, and *Fritillaria lanceolata floribunda* were selected for examination, and remarkably high percentages of bad pollen were obtained. Their conclusion is that such pollen is not necessarily an indication of

²⁹ HALLQVIST, CARL, Ein neuer Fall von Dimerie bei *Brassica Napus*. Bot. Not. 1:39-42. 1916.

³⁰ GATES, R. R., and GOODSPEED, T. H., Pollen sterility in relation to crossing. Science 43:859-861. 1916.